Lower Passaic River Study Area High Volume Chemical Water Column Monitoring QAPP Revision 1 (09/2012)
Resolutions to EPA Comments on Outstanding Comment #58

No.	Section/ Worksheet No.	Comment	Response
Part 1	Comment 58	EPA recommends that the CPG laboratory analyze an accuracy sample similar to that used in their initial evaluation of the PUF as presented in their May 4th 2012 memorandum titled *Summary of Analytical Perspectives HVS Laboratory Study Results*. As part of this study, Analytical Perspectives processed a none colloidal spiking solution containing native contaminants and surrogates through the PR2900 and extracted the PUF for analysis. Since this process has a limited set of replicated results, it is recommended that the recoveries presented in the May 4th memorandum form the basis for establishing a range to measure acceptable performance, i.e., a control chart. Although it would be desirable to include native PCB compounds in the spiking solution described in the May 4th memorandum, we understand that it may be difficult to work this into the initial round of sampling and that a set of replicate data is not available for PCBs as it is for dioxin and PCB surrogates. Since this process has already been used by the laboratory, the development time should be minimal with no perceived impact to the project schedule.	Clarification of this comment is requested: a) It is not clear what matrix EPA is requesting as a spiking solution. The comment indicates a "none colloidal spiking solution" has been tested at the laboratory and EPA is requesting a similar test. Please clarify if EPA is requesting a deionized water solution or a silica colloidal medium, both of which were included in the referenced study. b) Please indicate if this "spiking solution" is one to be added to a field sample, or if it is a unique laboratory-performed sample, as was done by the laboratory in the memorandum EPA cites. c) If EPA is requesting a liquid spiking solution to be added to the actual field samples, please indicate how this differs from the existing dynamic spiking solution currently contained in the HV QAPP. d) The CPG does not understand the data use of this request. Can EPA provide the CPG with the specific data use objective of this request? For instance, what would EPA's interpretation be of a result where the recovery does not meet the acceptable performance criteria? How is the mentioned "range to measure acceptable performance" different from the criteria established in the HV QAPP?
Part 2	Comment 58	In order to help verify the capture of the hydrophobic organic compounds (HOCs) that may be adhered to colloids, a minimum of a ten liter portion of the filtrate needs to be captured from one brackish and one fresh water sample for high volume extraction and analysis for targeted HOCs. This sample should be collected in a manner that best represents the volume of water pumped through the PR2900 system. The use of a flow splitter or metered capture might be the simplest way to accomplish this task. In	The CPG will develop a sample regime for collecting a minimum 10 liter sample of filtrate from one freshwater and one saline sample. Analytical Perspectives will be consulted for analytical technique. This information will be provided in Revision 2 of the HV QAPP. Note that since EPA is requesting only two samples of

		order to minimize the burden of this request on the CPG's laboratory, EPA is willing to have its project subcontracted laboratory perform the necessary analyses on these high volume samples.	filtrate be analyzed for HOCs, the CPG assumes that these data will be used to assist in the development of any future sampling and will not impact the data collected in the first round of sampling.

Resolution of Comments and Responses

A conference call was held November 15, 2012 to discuss these outstanding comments.

AECOM asked for clarification on the first part of EPA's November 6, 2012 email regarding Comment #58. EPA replied that they are requesting that the laboratory analyze a non-colloidal sample using deionized water with known spiked standards, similar to that analyzed by AP during their laboratory study. The sample would be more akin to a Special Laboratory Control Sample (LCS) than a PE sample, and would provide EPA with information to assist in an evaluation of the accuracy of the analytical program. The HV QAPP will indicate these data are "report only" and will not be used to qualify sample data. The CPG team agreed to include this sample in the HV program.

Part 2 of EPA's November 6, 2012 email regarding Comment #58 requested that the CPG collect 10-L subsamples of the post PUF filtrate from two samples (one freshwater and one saline) and analyze them for PCBs and PCDD/Fs. These samples would be for informational purposes only to determine if HOCs are passing through the PUF and can be detected in the filtrate. The HV QAPP will be revised to include these samples, and will indicate that the data will be reviewed upon receipt to inform any additional HV sampling. The sampling will be conducted by collected 1L subsamples at regularly determined intervals. These subsamples will be composited at the laboratory. Analysis methods have been provided to EPA for review and, upon acceptance, will be included in Revision 2 of the HV QAPP. Sampling will occur the week of December 17, 2012, and the 10L samples will be archived until agreement on analysis methods is achieved.